



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,381	09/01/2000	Sadik Bayrakeri	DIVA/265	7076
26291	7590	05/07/2004	EXAMINER	
MOSER, PATTERSON & SHERIDAN L.L.P. 595 SHREWSBURY AVE, STE 100 FIRST FLOOR SHREWSBURY, NJ 07702			MANNING, JOHN	
			ART UNIT	PAPER NUMBER
			2614	13

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/653,381

Applicant(s)

BAYRAKERI ET AL.

Examiner

John Manning

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7, 8, 12.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on pages 38, 44 and 46 references are made to U.S. Patent Applications where the attorney docket no. is given instead of the application serial number.

Appropriate correction is required.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8, 10, 17, 19-23, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Legall et al. (US Pat No 6,005,565).

In regard to claim 1, Legall et al. discloses a search tool that enables a user to search an electronic program guide.

The claimed method is met as follows: the claimed step of "receiving one or more search criteria" is met by Figure 3B, item 375. A "user, using a search tool window 302 (e.g., window 375, FIG. 3b), can establish the topics that form elements of a filter 304 that is input to a search engine 306" (Col 3, Lines 11-14). The claimed steps of "sending a request for a search along with the one or more search criteria to a head end of an information distribution system" and claimed step of "receiving one or more search results from the head end" are met by Figure 3A. "The power search tool includes query tools for specifying and selecting the filter elements used to perform the search" (Col 2, Lines 62-64). The "search results can be provided by the content-provider so that the receiving user system does not have to perform a search" (Col 5, Lines 44-46). The claimed step "wherein the program guide database is searched at the head end" is met by Figure 3A. "The user can select the information sources to be searched, such as the World Wide Web and electronic program guide (EPG) information" (Col 2, Lines 64-66). It is noted that the examiner interprets "one or more" to be written in the alternative, such that the limitation may be met by either one or more.

In regard to claim 2, the claimed method of "displaying an interactive program guide (IPG) page having include therein at least one received search result" is met by Figure 2, Item 220. "Window 220 adapts the EPG window to display the result of broadcast data query" (Col 2, Lines 57-58).

In regard to claim 3, the claimed method of "highlighting a channel object on the displayed IPG page corresponding to one received search result" is met Figure 2. The

"areas of the EPG corresponding to programs that meet the criteria are highlighted by a different color" (Col 4, Lines 53-55).

In regard to claim 4, the claimed method "wherein the channel object is highlighted by placing a cursor on the channel object" is met Figure 2. The "user may indicate selection by using a remote control to enter the station number ID or by moving the cursor to point to the desired program" (Col 4, Lines 60-63). The cursor "highlights" or indicates the program to be selected.

In regard to claim 5, the claimed method is met as follows: the claimed steps of "receiving an indication that the highlighted channel object has been selected; retrieving one or more streams associated with the selected channel object; and decoding the one or more retrieved streams to recover a selected program" are met by Figures 2 and 3B. The "user is able to change the current broadcast 625 to one of the programs currently broadcast that meet the search criteria. For example, this might be done by selecting a program from the modified EPG. Selection maybe achieved a variety of ways. For example, the user may indicate selection by using a remote control to enter the station number ID or by moving the cursor to point to the desired program. The system then responds by tuning to the program selected (the program being one of the programs that meets the search criteria)" (Col 4, Lines 56-65).

Claim 6 is met by that discussed above for the method of claim 5.

In regard to claim 7, the reference discloses saving "searches performed for subsequent references" (Col 3, Line 7). "Receiving an indication to view a next search

result” and “displaying an IPG page included therein the next search result” is inherent to the reference.

In regard to claim 8, it is noted that the examiner interprets “one or more” to be written in the alternative, such that the limitation may be met by either one or more. Therefore, claim 8 met by that discussed above for claim 2.

In regard to claim 10, the reference discloses that the IPG or EPG page includes only search results and no other program guide data. The reference states that the “EPG is modified to only display those programs that meet the search criteria” (Col 4, Lines 51-52).

In regard to claim 17, the program guide database that is searched inherently includes a plurality of programs entries for a plurality of channels for a particular time period.

In regard to claim 19, the reference discloses searching with one or more keywords. The “information associated with a broadcast can be more than just a sequence of keywords. Keywords can be combined with logical syntactic operators such as AND, OR and NOT to produce boolean combinations of search terms and to provide a more intelligent query” (Col 5, Lines 23-28).

In regard to claim 20, the limitation recited in the preamble is met by that discussed above for claim 1. The claimed limitation of a “guide region configurable to display a listing of a plurality of channels” is met program guide show in Figure 3B. The claimed limitation of “a search window object configurable to receive one or more criteria for the search of the program guide database” is met by Figure 3B, item 375.

In regard to claim 21, the claimed limitation is met Figure 2. The “user may indicate selection by using a remote control to enter the station number ID or by moving the cursor to point to the desired program” (Col 4, Lines 60-63). The cursor “highlights” or indicates the program to be selected.

In regard to claim 22, it is inherent to the reference that depressing a particular key on the remote control unit activates objects.

In regard to claim 23, the claimed limitation is met by Figure 2, Item 220. “Window 220 adapts the EPG window to display the result of broadcast data query” (Col 2, Lines 57-58).

In regard to claim 26, the claimed limitation of “a program guide source operative to store a program guide database” is met by Figure 3A. “The user can select the information sources to be searched, such as the World Wide Web and electronic program guide (EPG) information” (Col 2, Lines 64-66). The claimed limitation of “a controller coupled to the program guide source and operative to receive a search request that includes one or more search criteria” is met by Figure 3B, item 375. A “user, using a search tool window 302 (e.g., window 375, FIG. 3b), can establish the topics that form elements of a filter 304 that is input to a search engine 306” (Col 3, Lines 11-14). The claimed limitation of initiating “the search of the program guide database based on the one or more search criteria” is met by Figure 2, Item 220. The claimed limitation of the encoding unit and the cable modem are inherent to any bidirectional cable television network.

In regard to claim 27, the claimed limitation of "a controller operative to receive on or more search criteria and generate a request for a search with the one or more criteria" is met by Figure 3B, item 375. The search is conducted at the head end. "The power search tool includes query tools for specifying and selecting the filter elements used to perform the search" (Col 2, Lines 62-64). The "search results can be provided by the content-provider so that the receiving user system does not have to perform a search" (Col 5, Lines 44-46). The claimed limitations of a modulator, a demodulator, a transport de-multiplexer, and a decoder are inherent to any bidirectional cable television network.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9, 11-14 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legall et al.

In regard to claim 9, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose the step of receiving the search result via a stream identified by packet identifiers. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known to provide multimedia objects in the form of streaming media identified by packet identifiers so as to allow the data to be delivered and utilized at the users equipment

before the entire file is downloaded on the equipment. Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. to provide multimedia objects (i.e. the search result) in the form of streaming media identified by packet identifiers so as to allow the data to be delivered and utilized at the users equipment before the entire file is downloaded on the equipment.

In regard to claim 11, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose the step providing the search result in a particular order of relevance. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known to provide a search result in a particular order of relevance so as to allow the user to access programs of interest first. Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. to provide a search result in a particular order of relevance so as to allow the user to access programs of interest first.

In regard to claims 12 and 13, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose the step providing the search result base on show times where show time closest to present time is provided first and the search result having a scheduled show time furthest from the present time is provided last. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known to provide a search result base on show times where show time closest to present time is provided first and a search result having a scheduled show time furthest from the present time is provided last so as to allow the user to access programs that will be starting at a time close to the present.

Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. to provide a search result base on show times where show time closest to present time is provided first and a search result having a scheduled show time furthest from the present time is provided last so as to allow the user to access programs that will be starting at a time close to the present.

In regard to claim 14, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose that the search results are received as video slices generated via slice based encoding from the head end. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known to use video slices generated via slice based encoding from the head end. Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. with search results that are received as video slices generated via slice based encoding from the head end so as to conform to the MPEG standard.

In regard to claim 24, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose that the search results are received as video slices generated via slice based encoding from the head end. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known to use video slices generated via slice based encoding from the head end so as to conform to the MPEG standard. Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. with search

results that are received as video slices generated via slice based encoding from the head end so as to conform to the MPEG standard:

In regard to claim 25, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose that the search window object is composed as a bitmap. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known to use bitmaps for representation of characters or graphics. Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. with a search window object that is composed as a bitmap as a way to represent characters or graphics.

7. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legal et al. in view of Leary (US Pat No 6,425,133).

In regard to claim 15, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose that the search results are received as out-of-band data from the head end. The Leary reference teaches the use of transmitting data from the head end to the set top box on an out-of-band channel so as to conserve bandwidth (Col 2, Lines 25-67; Col 3, Lines 37-50). Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. with search results that are received as out-of-band data from the head end so as to conserve bandwidth.

In regard to claim 16, the combination of the Legall et al. and Leary references discloses a search tool that enables a user to search an electronic program guide with data received out-of-band from the head end. The reference fails to explicitly disclose

the step providing the search result in the form of compressed data. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known to compress data so as to conserve bandwidth. Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify the combination of Legall et al. and Leary receiving the search result in the form of compressed data so as to conserve bandwidth.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Legall et al. in view of Thomas et al. (US Pat No 5,666,645).

In regard to claim 18, the Legall et al. reference discloses a search tool that enables a user to search an electronic program guide. The reference fails to explicitly disclose that the program guide database that is searched is indexed. Thomas et al. teaches the indexing of a database so as to make entries easy to find. "The text fit process is a two stage process including a non-interactive background process that scans the database for work which needs to be done and interactive processes that scan for marked entries that are indexed and easy to find" (Col 7, Lines 27-31). Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Legall et al. with an indexed program guide database so as to make entries easy to find.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows.


- The Dunn (US Pat No 5,945,987) discloses an interactive entertainment network for providing short sets of preview video trailer.

- The Lemmons et al. (US Pat No 5,880,768) discloses an interactive program guide.
- The Seidman et al. (US Pat No 6,298,482) discloses a system for two-way digital multimedia broadcast and interactive services.
- The Rothmuller (US Pat No 5,635,989) reference discloses a system for sorting and searching a television program guide.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 703-305-0345. The examiner can normally be reached on M-F: 7:30 - 5:00 (off every other Wednesday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9695 for regular communications and 703-746-9695 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 308-HELP.


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

JM
May 3, 2004